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PAPERS READ
BEFORE THE
ROYAL GEOGRAPHICAL SOCIETY

DURING THE SESSION 1868-69.

[FORMING VOL. XXXIX. OF THE SOCIETY'S JOURNAL.
PUBLISHED MARCH 14TH, 1870.]

I.—*Notes on Manchuria.* By Rev. ALEXANDER WILLIAMSON, B.A.

Read, November 23, 1869.

MANCHURIA may be said to lie within N. lat. 39° and 49° , and E. long. 120° and 133° . These lines embrace the limits in both directions, but the bulk of the country lies like a parallelogram across the map N.E. by S.W., and measures approximately 800 miles in length and 500 miles in breadth. It is bounded on the south by the Gulf of Pe-chili and the highlands of Corea; on the east by the River Usuri, which divides it from the newly acquired Russian territory; on the north by the Amoor, and on the west by the rivers Naun, Soongari, and the South-Western Palisades. It is divided into three provinces, viz., Liau-tung, Kirin, and Tsi-tsi-har, or, to suit English ears, the Southern, Central, and Northern Provinces.

SOUTHERN MANCHURIA.—I have paid three visits to this country,—the *first* in the spring of 1864; the *second* in April, 1866, when I travelled from Newchwang overland to Pekin; and the *third* this autumn (1867), on which occasion I made two journeys, the one northwards, *via* Hai-chung and Liau-yang, to Moukden (also called Shin-yang), the capital of Manchuria, and the other round the promontory, crossing it lower, going as far as the Gate of Corea, and visiting every place of any importance both on the seaboard and inland. I am the more disposed to publish these notes as I have found it a country of much interest and great promise, and not that barren, bleak, and lawless country generally supposed.

Surface viewed in reference to its Natural Characteristics.—Southern Manchuria may be divided into two distinct regions,—the one comprising a plain, and the other comprehending an

MAP
to accompany
THE NOTES ON
MANCHURIA

by the
REV. ALEXANDER WILLIAMSON

Scale: 60 English Miles to One Inch.
0 10 20 30 40 50 60

Highways traversed by the Rev. A. Williamson

Other Highways

Cities ■, Towns & Villages ○○○

Heights in English Feet





Highways traversed by the Rev. A. Williamson Inns
Other Highways
Cities ■, Towns & Villages ○○○
Heights in English Feet





elevated country full of high mountains. A line drawn from King-chau (lat. $41^{\circ} 12' N.$, long. $121^{\circ} 10' E.$) north-east to Shin-yang, thence south by west through Lian-yang and Hai-chung to Kai-chau and the sea, will divide these two unlike districts, and give you the level country on the south and the mountains on the north and east. The former is an alluvial deposit, extremely fertile, except contiguous to the sea, where that saline exudation so common in the north of China interferes fatally with the productions of the soil. The other portion consists of huge mountain masses, interspersed with fertile and sometimes extensive valleys. The masses of mountains appear to be in no determined direction, but careful observation shows that the prevailing line is north by south, while there are several ranges of great length whose direction no one can mistake, and which lie north by south or north-east by south-west. As may be supposed, the character and aspect of these two portions of Manchuria differ very much. The plain is monotonous, and in some places dreary, especially in proximity to the sea; yet it has its charms. Fine crops of tall millet and other grain, large villages with their clusters of trees and a busy population, relieve the eye in summer; and numerous lagoons covered with reeds and swarming with water-fowl of every description, render it somewhat interesting even at the bleakest season of the year. The soil generally tends to be swampy, and few travellers fall in love with the region, for one day's rain will often make the roads utterly impassable for carts, and the wight caught in such a misfortune has a sad time of it; his cart floundering out of one black pool into another, now in the road, then in the fields, plunging and splashing away at the rate of one mile an hour, men, beasts, and carts covered from top to toe with mud.

The hilly country is extremely picturesque,—ever-changing views, bounding torrents, fountains bubbling up now and then, varied and abounding vegetation, flocks of black cattle grazing on the hill-sides, goats perched on the overhanging crags, horses, asses, and sheep on the less elevated regions, numerous well-built hamlets everywhere enliven the scene; and if you add to this a glorious, clear, blue canopy overspreading all, and fine bracing air, you will have some idea of the enjoyable nature of the region, especially in the spring and autumn. Again, while the hill-country differs widely from the level plain, the eastern side of the promontory differs in a perceptible measure from the western. The watershed is not in the centre, but much nearer the western shore. Making a rough estimate, one-third of the country lies toward the west, while two-thirds appear on the eastern side. This affects the climate, the fertility of the soil, and the productions of the country.

Towards the east and south-east the slopes are more gentle, and consequently more exposed to the rays of the sun, which, of course, in many ways heightens the fertility of the soil and increases the luxuriance of the crops. Moreover, lying south-east they receive the south-west monsoon, laden with its fructifying vapours, and are thus richly watered year by year. In consequence of this we found the country luxuriant in crops of all kinds of grain, and especially yielding a tremendous amount of Indian corn. The farm-steadings were overflowing with it, and it is exported in great quantities to Shantang and the south.

Climate.—The climate of Manchuria presents the extremes of heat and cold. In summer the temperature varies from 70° to 90°, and in winter from 45° above to 10° below zero. The rivers are generally frozen over by about the 20th November, and are not navigable till the middle of March. The crops grow and come to perfection in a few months, and by the end of October everything is safely housed. The winter generally begins with a snowstorm; after which the weather clears up, and hard dry frost sets in, which continues, with the relief of a fall of snow now and then, till the sun asserts its supremacy. This season is very enjoyable, warmly clad you can scour the country in all directions—marsh, lake, or river presenting no obstacle. Carts go in a straight line wherever they please, and it is during winter that the great bulk of the pulse crop is brought down to the seaports, and there stored for shipment when the rivers open. Such in general is true in reference to climate, but the physical character of the country produces some modifications. Among the hills the extremes are not so great, the summer heat, especially, not nearly so intense. Moreover, in the plains or basin of the Liau River the variation of the temperature is much more felt. In summer the flat surface, hardened by the sun, reflects its rays, and in winter radiates the cold; and yet even at Ying-tsze (Yin-koa), the least pleasantly situated spot, the climate is extremely healthy. My esteemed friend Dr. Watson assures me that serious sickness is very rare amongst the foreign residents. In several places on the eastern coast, especially in the neighbourhood of Siu-yen and north and eastwards, the climate is comparatively moist. The high ranges of mountains appear to attract and condense the clouds, so that the atmosphere there is more like some parts of Europe than Asia. I mention this, as every one knows that a moist climate is a great desideratum in the north of China.

In illustration of these remarks, and before proceeding to give a brief account of the animals and vegetation of the country, I am happy to be able to add the undernoted *Table*

of *Temperature* and remarks on the climate, taken by permission from the Trade Reports of T. T. Meadows, Esq., H.M. Consul at Newchwang for 1865:—

TABLE OF TEMPERATURE.

Month.	COLDEST.		WARMEST.	
	Morning, at Daybreak.	Afternoon, from 2 to 4 o'clock.	Morning, at Daybreak.	Afternoon, from 2 to 4 o'clock.
	°	°	°	°
January ..	—10	3	39	44
February ..	—10	7	35	50
March ..	0	14	43	60
April ..	27	41	53	68
May ..	41	52	65	74
June ..	57	70	76	84
July ..	62	74	79	87
August ..	63	73	77	85
September ..	41	52	73	80
October ..	28	42	66	71
November ..	7	17	52	61
December ..	—6	2	37	44

“These observations were all taken from Fahrenheit's thermometers, suspended on the northern faces of house walls, on which the sun never shines, therefore the coldest and coolest places. The coldest months are January, February, and December. The greatest cold may occur in any of these months; but is most likely to occur in January and first half of February. The warmest months are June, July, and August. The greatest heat of a summer may occur in any of these months, but is most likely to occur in July or first half of August.

“The number of days in any one winter on which the thermometer stands at daybreak below zero does not exceed ten, and it is rarely below zero for more than two mornings in succession. In the coldest winter afternoon it always rises above zero.

“In a cool room with Venetian blinds the temperature does not rise above 80° except for a few hours during some 25 or 35 afternoons in each summer, and these comparatively hot days do not occur together, but are distributed, with cool intervals, in periods of four or five days each throughout June, July, and August. In these months the temperature always falls below 80° at night. In exceptionally hot summers, as in 1862, the thermometer may stand at daybreak at 75° to 79° for some 20 days. In cool summers it rarely stands above 70° at daybreak. As to the highest temperature in these tables, 87°, it has only once been attained in my library during the five years of my residence, and that was 31st July, 1862. The prevailing winds in summer are south-south-west.

Fauna and Flora. In illustration of these remarks on the climate, and also by way of corroboration, I may mention a few things connected with the *fauna* and *flora* which greatly interested me. I met with many plants and shrubs which I little expected to find in that country. To mention only a few which all can appreciate: one of the first which strikes the

visitor on landing is the common dockweed, thistle, and dandelion, and these prevail more or less all over the country. As you proceed inwards you meet several varieties of the daisy, only somewhat more scraggy than "the wee modest crimson-tipped" flower at home. Rushes are found in all wet localities, and, strange to say, their stalks are all triangular and not round. Gaining the dry elevated soil you meet with the iris and pink, and the true Scotch thistle, which we found in several localities far removed from one another, and when you get on yet higher ground and follow the course of the valleys you find the blue-bell hanging in huge clusters on the sides of the ravines, and the larkspur and other familiar flowers growing in wild luxuriance. Once fairly among the hills your astonishment reaches its climax—the hawthorn flourishes in great abundance and beauty, the dog-rose attracts attention, peeping out here and there among the brush-wood; ferns in the shade of the rocks, or clustering round the roots of trees, or half-covered by the shrubs, surprise and interest the traveller. The mistletoe, that beautiful parasite consecrated by Druidical superstition, and hallowed by the yet more sacred associations of happy Christmas, is found in profusion in many of the valleys, especially about Kai-chau, and between Fung-whang-ching, and Hai-chung. The common willow (here a tree of considerable size and importance), the oak, birch, ash, white pine, common fir, hazel, and varieties of well known brush-wood, as brambles, &c., are found in all directions, and the sombre yet elegant weeping willow, growing generally in the neighbourhood of hamlets, adds a charm to the scene:—

"Tow'ring o'er the Newton woods
Lav'rocks fan the snaw white clouds,
Siller saughs wi' downy buds
Adorn the banks sae briery.
Round the sylvan fairy nooks
Heath'ry breckens fringe the rocks,
'Neath the brae the burnie jouks,
And ilka thing looks cheerie."

The similarity is strange, and were a school-boy transported to this region in autumn he would hardly recognise any difference. He would find hips and haws and hazel-nuts, to his heart's content, and the cry of pheasants and the song of birds would still more deepen the illusion. One thing is worthy of remark, the haws are somewhat larger than those at home, and sometimes, as in Shan-tung, as large as a crab-apple, but are nevertheless true haws. They are often dipped in boiling sugar and sold in streets, sometimes made into jam, but often eaten raw. The hips are the same as at home, having a covering of that delicious red albumen so delightful to boyhood. Various

other kinds of berries were found, such as a species of sloe; the only tree really conspicuous by its absence was the rowan tree. The *fauna* does not present such striking resemblances, though it comprehends many familiar animals. The fox, wild cat, and hare are common, but then in contrast to them are the tawny striped tiger, averaging 10 feet to root of tail; the wolf and wild boar abound towards the north, and on the confines of Corea. The feathered tribes are more like our own, such as wild geese, ducks, teal, snipe, &c. &c., pheasants, partridges, multitudes of common crows, the jackdaw, the solitary raven, magpie, pigeon, wild and tame, larks, thrush, linnet, &c. The barn-fowl are of the same species as our own, not that long-legged lanky Cochinchina fowl, but the round, plump, decent Dorking. One bird deserves especial notice, inasmuch as I have not found it described even in recent works on natural history. It is a species of lark, having the long straight hind spur peculiar to that genus, but at the same time possessing all the faculties peculiar to the mocking bird. It is a native of Manchuria, and is exported in great numbers to the northern provinces of China. It is highly prized by the Chinese, and there are few families in the north but possess one or more. It may be seen in a cage hanging over the door, and frequently the youths carry them about in their walks for their amusement. It readily learns to mew like a cat, or bark like a dog, and quickly picks up all sorts of noises which are common in its neighbourhood. It imitates all the neighbouring birds to perfection, and most amusing is it to hear it trill out all their songs and cries, one after another, in rapid succession. Sometimes it introduces variations, as the cry of animals, and pell-mell—

“ In one sequence of melodious sounds
Pours out all its muse.”

The bird is somewhat larger than the common lark, has a thick short bill, slightly hooked upper mandible, is characterized by a white collar round its neck, black spot on the breast, whitish belly, earthy brown back, with some white feathers in the wings, while the long outer feathers of tail and wings are black. It builds on the ground among the long grass, sings only in spring and first part of summer, and possesses all the other features of the true lark.

Rivers.—There are only two rivers of any importance in this quarter of Manchuria, viz. the *Liau Ho*, and the *Ta-yang Ho*. The former rises in Mongolia, and after pursuing an easterly course of about 400 miles turns southwards and pours its waters into the Gulf of Liau-tung. Within 150 years large junks used to go up the river as far as the city of New-chwang, but owing

either to the accumulation of debris, or, as I am rather inclined to think, in consequence of the rising of the country, they can only now reach the town, called Ying-tsze (Yin-koa), where the foreign settlement is, about 20 miles from the bar. Here, however, there is plenty of water for ships of large tonnage, and the river is about 650 feet wide. The tide affects the stream for many miles; good sized junks can yet ascend to Tien-chwang-tai, and boats as far as Moukden. On the Moukden branch, while small junks can yet ascend as far as *Tie-ling*, on the main stream, at high water there is about 16 feet on the bar. The other river rises among the hills, about lat. 41° N. and long. $123^{\circ} 30'$ E., receives a great many minor streams, but especially one from the borders of Corea, flows south-east, and pours its waters into the Yellow Sea. At first rapid, owing to the conformation of the country, it gradually becomes slower as it nears the ocean, and for the last 15 miles of its course is rather an important river. The tide also affects it for this distance, and it is fully taken advantage of for the purposes of commerce.

The Great Highways.—First among these stands the Imperial Highway, which runs from Pekin, through the Great Wall at Shan-hai-kwan, along the shore of the Gulf of Liau-tung, on to Moukden. Thus far it has watch-towers every 10 li ($3\frac{1}{2}$ miles), regular guard-houses, and all the appurtenances of the great roads—only, like the rest, it is now in a state of decay. Passing through Moukden this highway sends off a branch to Corea, while the main-road continues on to Kirin, where it again bifurcates, one branch going *via* A-she-hoh to San-sing, the limits of the empire in this direction, and the other *via* Ninguta and Hun-chwen to the sea at Possiet.

The second great road runs from Ying-tsze, the port of New-chwang, through Moukden, where it diverges north by west to Fa-kwho-mun, thence through Mogolia to Koong-ying-tsze, and Pe-tu-na, and thence on Tsi-tsi-har, Mergen, and the Amoor.

A third great road proceeds from Ying-tsze to Kai-chau, thence south to Foo-chau, where it divides—one branch going south to Kin-chau and end of the promontory, and the other south-east, to Pi-tsze-woa. Another road goes from Ying-tsze *via* Siu-yen to Fung-whang-ching and the Gate of Corea.

Besides these there are minor roads in all directions to all the chief villages, and by means of them you can go entirely round the promontory.

These roads may be said to be in a state of nature—no one looks after them—nor is there any toll, except at the Passes leading into Mongolia. The weather rules them. In the level districts they are just lines of deep ruts, irregular and uneven,

which, in course of time, would become utterly impassable. But the rain obviates this evil, by washing them all into a common puddle, when it ceases. Carts then plunge through them, leaving new tracks. The sun hardens them, and this process of repair is perpetually repeated, and it is all they receive.

They are provided with good ferries at all the rivers, and the inns that occur every few li are much better than the same hostleries in Shan-tung and Chi-li.

Chief Cities.—1. Moukden (lat. $41^{\circ} 40'$, long. $123^{\circ} 50'$), more commonly called Shin-yang, or the capital of Manchuria. It lies on the north of the River Shinorn, affluent of the Liau Ho, and is very pleasantly situated. It is a large city with high gates; the streets are well laid out, full of good shops. Being the chief city of the province, all kinds of produce peculiar to the country find their way to it, and it is thus an emporium of native goods, the seat of considerable distributing trade of all descriptions. We found many foreign commodities for sale, such as Russian cloth, Manchester goods, foreign iron, watches, &c. Fur shops, full of fine furs, were found in great numbers in the Great East and West Street. There were also several large book-shops, speaking well for the literary tastes of the people. There was a bell and a drum-tower, and all the paraphernalia of a provincial capital. The city was full of people, and everything had a well-to-do appearance about it. The southern and western suburbs are likewise very extensive.

2. King-chau-foo, lat. $41^{\circ} 12'$; long. $121^{\circ} 10'$. This city stands next in importance. It lies not far from the sea, and has a considerable trade in general goods. It has been described in a former paper.

3. Liau-yang, lat. $41^{\circ} 18'$; long. $123^{\circ} 10'$. This city, once the capital, embraces within its walls a large area of ground, much of which is now laid down under cultivation, chiefly as vegetable gardens. In the centre of the city, however, there are many large and excellent shops, and there appears to be a good amount of country trade.

4. Hai-chung, lat. $40^{\circ} 52'$; long. $122^{\circ} 40'$. This city, much smaller in circumference than Liau-yang, has about an equal amount of business. The shops were well stocked and the people well to do.

5. Kai-chau, lat. $40^{\circ} 30'$; long. $122^{\circ} 18'$. This city is more compact than either Hai-chung or Liau-yang, and has a considerable trade. It lies not far from the sea, and a good many junks visit the seaport which is connected with it, and thus there is some import and export trade.

6. Foo-chau, lat. $39^{\circ} 50'$; long. $121^{\circ} 38'$. This is a neat well built city, but of little importance, except as the centre of some country trade.

7. Kinchau, lat. $39^{\circ} 10'$; long. $121^{\circ} 36'$. Larger

than Foo-chau, walls equally good; it has about the same amount of business, but is a much less pleasant city. It is washed by the sea, but owing to the character of the coast no junks can trade in the neighbourhood. They accordingly visit the smaller seaports on the south-west, or Ta-lien-whan Bay on the south-east. 8. Siu-yen, lat. $40^{\circ} 15'$; long. $123^{\circ} 18'$. Fung-whang-ching, lat. $40^{\circ} 32'$, long. $124^{\circ} 11'$; and New-chwang, lat. 41° , long. $122^{\circ} 30'$. These cities possess one important feature in common, and one quite unlike those above described. The former are *bonâ fide* Chinese cities, within high walls, with good gates, &c., but these are peculiar in this respect; that the city proper is a comparatively small square enclosure, with a moderately high wall, occupied almost exclusively with the mandarin offices, while all the business is done in the suburbs, which are extensive and regularly laid out. The chief street in the suburb of Siu-yen is about a mile long, and contains many good shops. It is famed for its finely veined stones, and many find their occupation in cutting and polishing marble ornaments of various descriptions. 9. Fung-whang-ching. This city has a good country trade, and exceeds Siu-yen in population and importance. Being nearest to Corea, it has gathered some notoriety as the emporium of Corea goods, and is the first place where the Chinese and Korean officials exchange courtesies, as the embassy from the latter country passes on to Peking. 10. The native city of New-chwang is larger than either Siu-yen or Fung-whang-ching, but the suburbs are much less extensive. The place is famous for its excellent water, which is used in the manufacture of spirits, and is also noted for the production of saltpetre.

Seaports.—As might be inferred from the character of the country, there are many seaports of less or greater importance all over the coast, but there are only three of any note. The first and chief is Ying-tsze (Yinkoa), on the Liau Ho, where the foreign settlement is established. The main street of this is fully 2 miles in length, the native warehouses are most extensive, and the trade is very large. Junks from all quarters visit it, and the foreign shipping is now considerable. The seaport next in magnitude is Ta-koo-shan, lat. $39^{\circ} 55'$, long. $123^{\circ} 50'$. This town is on the Ta-yang Ho, and lies about 12 miles from the Yellow Sea. Like Ying-tsze it possesses many large native warehouses, and is the medium through which a tremendous amount of produce from the north is exported. It competes with Ying-tsze in soliciting the trade in pulse and bran cake, but is not likely to succeed. At the same time we met great quantities of goods on the way to this port, which, as far as we could judge, could as easily have been conveyed to the other. There was a great amount of native shipping in the harbour, but chiefly junks of

second and third class. Opposite the port the river is about 1100 yards wide, a fine broad flowing stream. The tide rises and falls a good many feet, thus facilitating navigation, but the bar is more formidable than at Ying-tsze, so much so that large southern junks find it advisable to discharge their cargoes outside. Like Ying-tsze, the river is frozen over from the end of November till March. Another harbour of some note is that called Pi-tsze-woa, lat. $39^{\circ} 18'$; long. $122^{\circ} 18'$. This port is situated on the sea, and the harbour is pretty well defended from winds from all quarters by a series of rocks, which form a semicircle around it. Unfortunately the water is shallow, and many of the junks are left high and dry when the tide is out. This could be remedied by a pier, and it would be worth while to construct one, for this place has the great advantage of being open all the year round. The warehouses here are also large, and the import and export trade considerable.

Villages and Hamlets.—Villages of any size are much less frequent than in China (except in some parts of the alluvial plain), and instead of them we have hamlets of a few houses here and there all over the country—embryo villages, which one day will doubtless rival their progenitors on the mainland. They are generally situated in pleasant localities, and are well-built of good stone, having farm-yard, dwelling-house, and everything complete. As a rule, the people are peaceably disposed. In all our travels, in regions near and remote, in the plain and among the mountains, we have never met the slightest molestation whatever. We have heard of robbers and mounted banditti, but have had the good fortune not to have met with one.

Population.—T. T. Meadows, Esq., her Britannic Majesty's Consul, who has travelled extensively over the province, and who is now on an arduous journey towards Tsi-tsi-har, estimated the population to be about 12,000,000. Putting one thing with another I am inclined to think the numbers not far wrong. The population consists of Manchus and Chinese. Originally the abode of the former, they have in a great measure migrated northwards, and the country has been occupied chiefly by immigrants from Shantung. A proportion of the aborigines still remain; in some places as many as one in three, in other places one in ten, and so on in various ratio; but those who have remained behind have invariably settled down either as farmers or in some other definite occupation, and are assimilating themselves to the Chinese in almost every respect. Some few of the more aged still speak the Manchu language, but in addition they all speak the Mandarin colloquial, and the youths are taught from Chinese books in their schools, just as over other

portions of the empire. In some places youths are instructed in the Manchu character after they are acquainted with the Chinese, but such instances are rare, and the language is evidently dying out. The prevailing portion of the inhabitants are thus Chinese, and have introduced all the peculiarities of their fatherland into their adopted country. The population being less dense, the soil fertile, the country new, they have more money to spare than in Shantung and elsewhere on the mainland, and on the whole are extremely comfortable. The head men of hamlets generally club together and invite over some poor scholars from their native district to instruct their progeny, and thus education is diffused among them as well as in the cities. Year by year great numbers of coolies come over, and make high wages as labourers. Some go back, carrying their earnings with them ; while others invite their families over, and settle down permanently. Thus annually they add to their numbers. When travelling among them it was interesting and amusing to find them eagerly enquiring of my assistants, who were from Shantung and Chili, where they came from ; and if it happened, as it often did, that one or other was acquainted with their native districts, they at once had no end of questions about their kindred and friends, just as old colonists all the world over besiege emigrants fresh from home.

Industrial Pursuits.—The bulk of the population is engaged in agriculture and in trades bearing upon that pursuit, such as blacksmiths, wrights, carters, &c. Some are employed in mining operations and others in fishing, but these are a mere fraction of the population. Cotton cloth and silk are manufactured to some small extent, but that is performed by the farmers and their families in their leisure time. Their crops raised are diverse and important.

Wheat.—Whenever spring prevails, wheat is the first thing attended to. It is sown at once, and is ripe by the beginning of June. The ground is then again prepared and pulse put in, which in its turn is ready for harvest in October. Thus they have two crops. After the wheat is sown, they prepare for their millet, maize, potatoes, &c., of which they have only one crop.

Cotton.—This important article of commerce is grown in several places in considerable quantities. The chief producing districts are first, Kin-chau ; second, Hai-chung and Liau-yang ; third, Hyong-yoh, south of Kai-chau. The staple is very fair and the colour very good, and it could be grown in much greater quantities if necessary. They plant the seeds towards the close of April, and pluck the cotton in October. They steep the seed in liquid manure before sowing, but this is the sum

total of all the labour expended upon it. They never irrigate it, but leave it to the influences of the weather.

They express oil from the seed, which they use for a variety of purposes. The refuse, in the form of small cheese or cake, they use for feeding cattle, the roots and stalks and branches they burn for fuel, and thus they utilise every particle of the plant. As I have elsewhere hinted, seed from this region might grow and be remunerative in many places of central Europe.

Silk.—The mulberry-tree and the silk produced from it are very rare; but the common coarse porjee silk can be had in any quantity, and could be grown to any extent among the mountains hitherto unused for that purpose; but I need say nothing in reference to these matters after the able report of T. T. Meadows, Esq., her Britannic Majesty's Consul at New-chwang, to which I beg to refer the reader.

Indigo.—This is produced in tremendous quantities in that district of country which lies to the north of Moukden. We met strings of carts of seven and eight mules each, day after day on our journeys, conveying this commodity to the south for sale and exportation. Each cart carried about 2000 catties, and we met from 20 to 30 carts *per diem*, so that the sum total must be something prodigious. Though produced in great quantities in the above-named district, it is by no means confined to that locality. We found it in several places in the centre of the country, and on the north-east coast. The quality appears to be excellent, and it deserves more attention at the hands of our merchants.

Tobacco is grown extensively in all directions, and is exported in great quantities. It is highly relished for its good flavour, and brings a good price in the south.

Minerals.—Not only is the soil fertile and the crops varied, the country underneath is rich in mineral resources. Coal prevails very extensively in all parts of the country. We found it both in the north and south in common use among the people. One of the chief producing districts lies on the north-east of Liao-yang. In this locality two places stand out prominently—one called Ma-kia-kow, about 60 li, or 18 miles, north-east of that city, and the other, Pun-hi-hoo, about the same distance from the former place in the same direction. Large quantities of coal are mined in these places and distributed all over the country. The coal is good and used for all sorts of purposes. Another producing district lies 90 li south of the city of Foo-chau, in close proximity to the coast. Junks can come close to the pits, and thus great quantities are exported, especially to the eastern portion of the province of Shantung. The seams appear

to be of great thickness. In reply to my inquiries, the people informed me that they could not speak definitely on this point, that the coal existed in all directions and in the mine was not only in front of them but above and beneath them, and that they dug out from the heart of it. Referring to the state in which the coal was brought out, chiefly small, they said they could not mine it in lumps, but referred me to another region where coal was obtained in large pieces. In addition to these two localities, which are in active operation, I heard of others which have been mined up to a very recent date, but now closed. The one alluded to with the greatest interest by the natives lies in lat. $39^{\circ} 30'$, long. $121^{\circ} 58'$, called Po-la-dien, a place near the centre of the promontory. Here coal had been mined up to the middle of last year, and the quality was reported to have been very fine. Another place was the smallest of the two islands to the south-west of Kin-chau, called Sian-yen-tan, and yet another contiguous to the sea in the Ta-lien-whan Bay, south by east of that same city. Besides these, coal is also reported to exist to the east of the Ta-yang Ho.

Peat.—This fuel exists in great abundance along the east of the promontory. We found it in use at the seaport of Pi-tsze-woa, and were not a little surprised to find such a commodity in this country; but our wonder and amazement reached its point of culmination when, two days afterwards, we found it at every inn—huge stacks of it carefully built up in every farmyard, a “peat reek” perfuming everything, and at last entering a peat-bog which continued along the line of the great road for fully 50 miles. We saw the cuttings from which it was obtained, and walls of peat of great height in process of drying. The peat is the good black, not the brown variety.

Iron.—Two districts are famed throughout the country as producing this metal. The first, Pun-hi-hoo, where coal is likewise mined, and the other about 18 miles south-west of this, called Sa-ma-gi. The iron differs in quality—that yielded by the former place being much harder, and taking on a finer edge and polish than the latter. The ore must be extremely abundant in these places, as, excepting what has of late been bought at the foreign market, they supply the wants of the whole country. Though the production is at present confined to the two places just named, it must exist in many other localities. One place we know, viz., that island on the west of the extreme end of the promontory, called the Liau-ti-shan, or the “honourable iron hill,” which contains magnetic iron-ore, if not wholly composed of this material, as it affects the compasses of ships which sail too near it. This, no doubt, is related to that fine magnetic ore which abounds on the opposite coast of Shantung.

Gold.—As might be anticipated, this precious metal is no stranger. It is found in many places towards the south of the promontory in greater or lesser quantities; but the most famous district is that on the east coast to the north of the Py-li River. Here we passed over gold-diggings and a gold-producing country, about 40 miles in length by 10 broad. Last year a serious quarrel arose among the gold-seekers, which resulted in murder, and on this account the mandarins interfered and put an end to the occupation for the present. We also heard of gold at Kin-chau, which may be interpreted the “gold-district city.”

Silver, Copper, Lead.—Silver is said to exist in the mountains to the west of Liau-kia-kow, lat. $40^{\circ} 2'$, long. $122^{\circ} 10'$, and also in other places; but, of course, it was impossible for me, passing through the country, to obtain much definite information as to metals of this kind. There can be no doubt of their existence—the nature of the rocks, the direction of the mountains, the fact that they abound in Shantung and Corea, still point to the certainty of their presence. But not only so—there are other circumstances which lead us to the same conclusion. As we have seen, the prevailing direction of the mountain ranges is north by south, or north-east by south-west. This harmonises with the line of mountains in Japan, Formosa, Loochoo, and Aleutian Islands. Moreover, as M. Elie de Beaumont has shown, “it coincides with the great circle of the terrestrial sphere which passes by the Cordilleras of South America and the Rocky Mountains of the north, whence we may infer that the mountain system of Oriental Asia and that of the Great American chains are of the same date.” But a still more important influence appears equally evident. The mineral wealth must be distributed in similar proportions in both continents. We know this to be true of coal and iron, which are always the first minerals to be discovered; for in no quarter of the world, except America, have we such extensive coal and iron fields as in China, and there is little doubt that the magnetic ore in Vancouver's Island is the same as that which abounds in North China. The same appears true also in reference to gold. California and Columbia lie in nearly the same parallels of latitude on the opposite coast of the Pacific Ocean, and the distribution of gold here appears quite equal to that in America. It is found in the affluents of the Yangtze Kiang, on the extreme west; in Shensi, where the Jesuit fathers tell us that an infinite number of people gained their livelihood by it; it abounds in Shantung, Corea, Japan, Manchuria, and not only so, but there are great gold-diggings scattered here and there over Mongolia and Siberia. Few knew aught of the great extent of the coal and iron, and no one had any idea of the abundance of silver, copper, lead, &c., in the

Western States, till the recent scientific investigations appointed by the American Government disclosed their hidden treasures; and so we venture to predict, that were a similar investigation to be made here, it would lead to discoveries equally astounding.

Commerce.—Under this head I beg to refer the reader to the Trade Reports sent in from time to time by Mr. Meadows, and also to the valuable memorandum presented by Mr. McPherson in the Custom-house Returns for 1865. Since, however, this may fall into the hands of some who may be unable to procure these papers, I subjoin the following Table from the Custom-house Returns for 1866:—

NEW-CHWANG.

IMPORTS.	1866.		1865.	
	Pieces.	Taels.	Pieces.	Taels.
Cotton piece goods:—				
Shirtings, grey	30,450	..	30,230	..
Shirtings, white	4,450	..	9,600	..
T cloths	2,650	..	12,308	..
Other descriptions, total value ..	..	153,789	..	156,507
Woollen goods .. .. .	..	34,552	..	58,900
Camlets pieces	300	..	708	..
Habit, broad and mid. cloth, and } Spanish stripes }	204	..	645	..
Lastings	645	..	..	..
Tongills, lustres, &c.	1,405	..	3,414	..
Opium peculs	2,671	1,708,310	1,518	897,882
Sugar and candy ,	36,169	181,071	45,492	244,433
Iron, nailrod, and bar ,	19,384	53,395	14,807	46,268
Window glass boxes	1,630	4,075	3,607	7,018
Sundries, value .. .. .	..	211,575	..	273,144
Total taels .. .. .	..	2,346,767	..	1,686,176

EXPORTS.	1866.		1865.	
		Taels.		Taels.
Rice peculs	..	..	37,728	75,456
Bean-cakes pieces	1,753,733	666,418	1,787,978	806,586
Beans and peas peculs	746,732	897,081	901,320	1,031,050
Bean-oil ,	3,998	18,394	11,040	72,759
Barley ,	3,729	5,593	3,418	10,254
Millet ,	27,888	16,733	34,078	27,262
Cotton .. .. . ,	..	..	309	11,333
Ginseng ,	154	28,378	84	15,188
Shamshoo ,	5,108	12,774	2,667	10,672
Melon-seeds ,	6,476	19,431	2,442	7,332
Sundries .. .. .	..	255,128	..	58,442
Total taels .. .. .	..	1,919,930	..	2,167,314

The trade for the year 1866 stands thus: imports, value taels 2,346,767; exports, 1,919,930: total, 4,266,697. This only

includes what was shipped in foreign bottoms at the port of Ying-tsze. Supposing the goods shipped in junks at that place to equal that in foreign vessels and all the other seaports taken together to be one and a half more than the native junk-trade at that port (a very moderate computation), it would give tael 14,933,439, or nearly five millions sterling, as the sum total.

Those who have followed me so far must often have thought of Canada in comparison with this country. They possess many points of resemblance. A climate similar in its general features, an equally fertile soil, yielding similar crops, and each having a northern territory famous for its furs, each drained by a great river and possessing a variety of minor seaports. But in some respects Manchuria bears the palm, the climate is a shade less severe, it probably possesses greater mineral wealth, produces cotton and silk unknown in that dependency, and in addition has seaports on the south which are open all the year round. I make this comparison to bring the matter home. How important has Canada been esteemed, and how poor our appreciation of the other! And yet the latter is the richer of the two.

The Development of the Country.—Having thus surveyed Southern Manchuria, the question naturally arises, how can the resources of the country be best developed? I am not forgetful of the proverb, *Ne sutor ultra crepidam*; but, having travelled over the greater portion of the country, and become naturally interested in its people, I may be pardoned for making one or two suggestions on this point. Utopian, though it may seem, yet believing as I do in the law of advancement which Almighty God has imposed upon man, and which is so rapidly working itself out in these days, I venture to suggest as the first and chief means towards the opening up of the country, that a railway be constructed commencing at *Ta-lien-whan* Bay on the southern point of the promontory, and proceeding northwards viâ Kin-chau, Foo-chau, Kai-chau, Hai-chung, Liau-yang, Moukden, and on to the pulse and indigo producing districts in the north. Nature would seem to have provided for this, inasmuch as from the point mentioned on through the busy cities I have indicated, there is a succession of valleys running north and south, so that there would be no need for tunnelling and little need for cuttings. A few insignificant ridges, which would require only slight gradients, being the only obstacles of any importance. Reaching Kai-chau, the country beyond northwards is a level plain. This line would thus command the commerce of the whole country, it would have minerals along its whole course, and a coal-field at *Ta-lien-whan* Bay, its southern terminus. *Ta-*

lien-whan Bay is well known for good shelter and depth of water, as it was the rendezvous of our fleet during the winter of 1859. It is open all the year, and so obviates that stagnation which lies as an incubus upon energy for so many months in the year. For many reasons the present port, Ying-tsze, would never do in the new order of things; the bar at the mouth of the river, the fact of its being frozen up for fully four months every year, independently of the apparent shallowing of the water resulting at once from the accumulation of silt, and the rising of the country, which must end in leaving that market like its predecessors, high beyond navigable limits, would infallibly remove business to the more eligible spot. Again, a railway would provide for the permanent security of the country, bring producer and purchaser face to face, prevent illegal imposts, and in ten thousand other ways benefit the people. The necessity for the former consideration was powerfully forced on my attention during my last visit. Towards the close of the summer, only two months before my visit, 200 robbers landed from a junk at Ta-koo-shan, and billeted themselves upon that populous town and levied blackmail. I could hardly believe it, yet so it was. A portion of them had stayed in the same inn where I lodged, and not only made a most exorbitant demand upon the townsmen, but had every requirement complied with. Eight of them appeared one morning at another small seaport, Ta-chang, through which I passed, and demanded 1000 taels each, with the threat that if not forthcoming immediately their comrades would come down and burn the place. They got the money at once, and in this fashion they went over the country for some time till soldiers came from Kirin, or rather till they themselves were pleased to go. They then embarked in a large junk, and by a clever trick (as I believe) got the gunboats (English and French) at Chefoo, to start on a wild goose chase to the Miau-tau Islands, then, the coast being clear, came into this port (Chefoo) in a heavily armed junk with good papers, refreshed themselves, and then made off to the south. They were called the "hong-hu-tsz," or "red-bearded robbers." I asked for an explanation of this name, and was informed that they had their faces painted red, and coloured horse-hair for beards. What applies to Manchuria applies to the whole of the north of China; fifty well-mounted robbers could ride through the length and breadth of the land. There is no sense of security, no one knows in what direction they will move, they come nearly as quick as news can travel; in fact generally announce their own arrival. In consequence of this the people bury their silver and gold, transport their clothes and valuables to strongholds, and content themselves with the bare necessities

of life. In such a state of matters no trade can flourish. And not only so, traffic is not safe, even on the most important highways. Witness the newly appointed Chinese minister, Mr. Burlinghame, who was intercepted by mounted robbers under the very eyes of Peking, between the capital and Tientsin. Something must be done immediately, otherwise disorganisation will increase and commerce vanish, and it must be something powerful and thorough, not the extension of the foreign inspectorate, not the building of arsenals and naval dockyards on the coast, not the training of a few paltry bands in foreign drill and such things, not the medicating the surface while the disease is in the vitals and widely spread over the whole body corporate. A bold stroke must be made if the country is to be saved, and I again submit that in view of its extent, the wide diffusion of foreign ideas, arms, and modes of warfare, a railway scheme is now a *sine quâ non*.

Again, China needs young men of education and integrity to aid in developing its mineral wealth, and in the manufacture of its staples. Here then would be a new field of enterprise opened to engineers, machinists, and others of comparatively little capital who might come out, and by entering into engagements with wealthy Chinese firms, at once secure their own fortunes and help in the advancement of this great people. Such a scheme would be looked upon askance by capitalists at home and merchants in China as a thing likely to mar foreign trade. But it could do this only for the moment, and the result undoubtedly would be advantageous for all. In any case it must come to this, and merchants must prepare for its advent. Once acquainted with their own resources, cognisant of the fact that the erection of manufactories on the spot would greatly benefit themselves, and permitted by a wise and fostering government, the Chinese are sure to enter on this path.

CENTRAL AND NORTHERN MANCHURIA.—*Extent and Boundaries.*—In the former part of this paper I endeavoured to give some account of Southern Manchuria, and now I add some notes taken during a long journey through the Central and Northern portions of the country. For the sake of clearness and brevity, I shall first give an outline of my route as indicated on the accompanying map, and then speak of the various things which appear worthy of remark, under separate heads.

Starting from Ying-tsze, the port of New-chwang, we travelled north-east to Moukden, thence north by west to Fa-kwhomun. Passing through this gate we entered Eastern Mongolia, and travelled north by east to Kwan-chung-tsze. Here we diverged north by west to Pe-tu-na, and thence eastward to A-she-hoh.

From this our route lay east by north till we reached San-

sing, on the Soongari, the last city in this direction in the Chinese Empire. The Russians have surveyed the river down this length, and have twice or thrice visited this place, so that our explorations and theirs have met, and the whole of this quarter of Asia may now be considered as known. Our intention was to proceed from here due south to Ninguta, but finding that there was no cart-road—only a dangerous bridle-path—not even used by Mandarin runners, with no accommodation, and also ascertaining that boats would occupy too long a time, with no population to work amongst, we were forced to retrace our steps a portion of the way, and then proceeded south to Kirin; thence home *viâ* Ki-yuen, Tie-ling and Moukden; having travelled in all about 1400 or 1500 English miles.

Central Manchuria or *Kirin* is bounded on the north by the Soongari, on the east by the Usuri and Russian territory, on the south by Corea and Liau-tung, on the west by Soongari and a line of palisades, which, by the way, like the other palisades, exist only on the map and in the imagination of his Imperial Majesty the Emperor of China.

There is a sort of gate at the Passes, and a ditch or shadow of a fence for a few yards, but you can ride round and round the whole affair.

The Russians estimate this province at 135,000 square miles in area.

Surface.—Like Southern Manchuria, Central Manchuria may be divided into two portions, the one a level prairie country, and the other mountainous; only the two portions are very unequal in size—the former being all comprised in the north-west corner, within the link of the Soongari, while all to the east of a line drawn from Fa-tuh-ha-mun through A-she-hoh, and on north-east to the Soongari, as well as the remainder of the province in south and west, is full of hills of various magnitude.

The Mountain Ranges.—The chief of the mountain-ranges in Central Manchuria is that called the Shan-alin Mountains. Their highest peaks lie on the south-east of Kirin, where they reach the tremendous height ranging from 10,000 to 12,000 feet, their summits being covered with perpetual snow and glaciers. From this point they run north-east and south-west. Towards the north-east they form the watershed of the Hurka and the Usuri, and afterwards the Soongari and Usuri, and towards the south-west they form the boundary of the plain of New-chwang and the backbone of the promontory. These mountains sometimes rise into hills of great beauty and grandeur, as, for instance, in the hills of One-thousand Peaks near Hai-chung, hills near Sui-yen, and the range from Fung-whang-ching to the Corean Gate. Another range of mountains runs

through a portion of Northern Manchuria, enters Central Manchuria about 80 miles east of A-she-hoh, proceeds south by west parallel to the River Hurka—forming a second watershed—then continues its march past Kirin on towards Moukden, where they gradually subside into the plain.

A third range of mountains lies in the Russian territories east of the Usuri and the Amoor. Their highest peaks run parallel to the sea and not far distant from it; so that the streams which flow eastward are not to be compared in size and volume to those which flow westward, and pour their waters into the Usuri and Amoor. This range, as a rule, appears to be higher than those west of it. (These are not to be looked at as single ranges, but rather separate mountain districts, lying in the specified directions, and often forming mountain masses where the mountains appear to be tumbled about in all quarters.)

It will thus be seen that the prevailing direction of the ranges coincides with that of Southern Manchuria, Shan-tung, and, indeed, China in general. One peculiarity of the mountains in this region deserves notice. We repeatedly come on isolated hills in the plains, often perfect cones. These sometimes lie in a line about 15 or 20 miles distant from one another, as, for instance, Siau-ku-shan and Ta-ku-shan, south-west of Kirin, and sometimes dotted over the plain like dish-covers on the table. But whether in range or in solitary beauty, they have a family likeness. The conical configuration prevails, and this shape, together with the peculiarity just noted, extends not only over Manchuria, but into China, affording a still further proof of their geological identity.

The Great Rivers.—Corresponding to the three chains of mountains are three great rivers, viz., the Soongari, the Hurka, and the Usuri.

The Soongari, which is by far the most important, both in reference to length of course, volume of water, and extent of basin, takes its rise on the north-western side of the Shan-alin Mountains, and proceeds in a direction north by west, receiving a great many tributaries from the surrounding hills, and sweeps past Kirin—a majestic river. Passing Kirin its course lies north by west, till it passes through the palisades about lat. $44^{\circ} 30'$, where it enters Mongolia, and takes a decided north-westerly direction. This it continues till it passes Pe-tu-na, where it receives the River Nonni, and there flows east by north, gradually diverging northwards, till it joins the Amoor, or rather till the Amoor joins it; for I am inclined to think that it should be looked upon as the parent stream, inasmuch as it has at least an equal, if not a larger volume of water, and, moreover,

maintains its former direction after its junction with the Amoor. Its flow is not uniform, swifter, and more compressed; about Kirin it becomes wider, and more sluggish after entering the Mongolian Steppes. In this quarter it sometimes spreads out over a mile in width, with an average depth of 3 or 4 feet. Here and there it forms numerous islets, and sometimes divides into two branches, which flow nearly parallel, having a belt of fine land between them. Nor does its volume increase in proportion to the length of its flow, owing to the nature of the country and consequent absorption.

We crossed it at four different places; first at Pe-tu-na, where we found it about $1\frac{1}{4}$ mile in width, but having only an average depth of water of about 3 feet. The second time at about N. lat. 46° , long. $128^{\circ} 10'$, where we found it about 400 yards wide, and deeper than we could ascertain with the means we had—certainly over 20 feet. The third place was at San-sing, where it was compressed into a very rapid, deep river; the fourth place was on our return journey, a little north of Kirin, where we found it about 300 yards wide, and an average depth of at least 12 feet. In the centre we could not touch the bottom as we passed over. This speaks of the great height of the hills in that quarter, for we were not much above 80 miles from its source as the crow flies. Travelling parallel to its course in Mongolia and Northern Manchuria, we thus saw a good deal of it. There were a good many third and fourth class junks here and there on its waters, and it is navigable up to Kirin, and beyond it for some distance; and were it not for these shallows it might be a very serviceable river during the season in which it is open. As it is, a good deal of produce is carried down the stream; but, owing to the immense bend which the river makes, goods are generally conveyed in carts from San-sing, A-she-hoh, and the northern markets to Kirin, and of course they also take return cargoes.

The Russians have proceeded up this river in steamers as far as long. 127° E. Some say they have been as far as Kirin, but of this I cannot speak positively.

The Usuri.—The river next in point of size to the Soongari is the Usuri. It rises about lat. 44° , receiving numerous tributaries of more or less importance, and after a course of about 500 miles pours its waters into the Amoor.

At first it partakes more of the nature of a mountain torrent, but it gradually loses this character, and after reaching Sungachau it enters a wide plain. Passing this it again flows through a mountainous district for about 100 miles, where it enters a prairie country, and thus through swamps and steppes flows onward to the Amoor. For a full account of this river see

Veniukof's 'Exploration of the Usuri' in Ravenstein, pp. 234-259. Russian steamers now ply this river weekly up to the Hinka Lake, whence goods are transferred overland to Possiet and Port May. They have also a telegraph along the banks of the river to Kha-bar-of-ka, where it joins the main wire for Central Asia and Europe. They are thus in perfect communication with all their settlements in this remote quarter. They purpose this year placing another steamer on the river Sui-fun, which will materially shorten land carriage to Possiet and Korea.

The Hurka.—The third river is the Hurka, or the Mootwan Ho (the River of the Mootwan flower) as the Chinese call it. It rises about lat. 43°, not far from the source of the Soongari, takes a northerly direction, passes by Ninguta, receives two important tributaries from the west, and one from the east, and then debouches into the Soongari at San-sing. Here at its junction we found it almost 200 yards wide, with a good volume of water. At this city we found several small junks from Ninguta trading with the merchants. The people told us that the country through which it flowed was full of large swamps and huge mountains, covered with foliage to the summits, and that there was no population on the banks, only solitary huts of gin-sing seekers here and there, and hardly any of the soil cultivated; boats can navigate the river in summer, and in winter sledges are used on the frozen surface.

Configuration of the Country.—Judging from the character of the mountain-ranges and flow of the rivers, it appears that the country slopes from east to west, and from south to north—the course of the Soongari River marking its lowest point—from which the country again begins to ascend towards the north and west; so that Central Manchuria and Northern Manchuria is just one huge basin, corrugated by several mountain-ranges, with their respective streams,—the mouth of the basin lying towards the north-east.

Climate.—The extremes of climate are more marked than in Southern Manchuria, but by no means so excessive as to interfere with agriculture. The winter begins about the close of October, and ends at the commencement of March, and the other seasons are proportionately narrowed; but the shortness of the time is compensated as elsewhere by the rapidity of growth and maturity. In the absence of thermometrical observations I took a note of the state of agriculture as I passed through the various places, which will help to give some idea of the climate.

In the neighbourhood of the Soongari we found ice still hanging on edges of deep wells, and I wore my top-coat in the cart in the early part of the day. The table of annual temperature for the port of New-chwang, which I gave in a former page, will also help us in reference to Central Manchuria, for if allowance be made for diminution of mean temperature throughout the year, it will give a comparatively good idea of the distribution of heat and cold. There appears to be more regular and general distribution of rain here than in the Southern Province. When travelling in this quarter hardly a day passed without a shower or two, just like April showers at home, refreshing the earth, and succeeded by pleasant sunshine.

The Great Highways.—While treating of Southern Manchuria, I spoke of the highways which ran through this portion of the country, and thus I need say no more of the chief roads. I may only say that there are good roads from Kirin to Kwang-Chung-tze, from Kwan-chung-tsze to A-she-hoh, and from Pe-tu-na to A-she-hoh, as well as many minor roads intersecting the country, of the same character as those in the south. They are also provided with good inns. North of the Soongari we had to travel by fixed stages, owing to the paucity of population.

The General Aspect of the Country.—Travelling from Pe-tu-na eastward the country presents one huge level plain, only broken by very insignificant undulations. Considerable patches of this prairie are cultivated, especially in the vicinity of hamlets, but the rest is just a sea of tall grass, waving in the wind, with little brushwood and few trees.

But the monotony of the steppes is more than compensated by the variety, beauty, and often boldness of the mountain districts. Here you have everything that can lend a charm to the landscape—hills and valleys, woods and streams, in ever changing aspects. The luxuriance of the vegetation is remarkable. In Shantung, and on the Manchurian promontory, the tops of the hills are as bare as bald heads—the vegetation gradually increasing as you descend, like sprinklings on the cheeks; but in Central Manchuria the hills are as green as in Scotland, and in many places cultivated to their very summit. Moreover, far north towards San-sing we crossed over a high mountain ridge, with oaks, and elms, and willow trees of huge size; and having crossed the Soongari, about long. $128^{\circ} 10'$, and entered Northern Manchuria, our route lay along the plains, on the north side for about 100 miles. Here we could see the country in the south, and I confess it amazed me to find the hills on the banks of the river, and the high peaks stretching far behind, covered with

trees of such a size and foliage—so profuse that I could compare it to nothing but those beautiful islands in the East Indian Archipelago, clothed from head to foot with luxuriant vegetation, only of a different character. Trying to account for it, the thought struck me that the severe frost for four and five months every year must freeze and retain the moisture in those hills, so that when the sun asserts its power, the trees are at once supplied with abundance of water.

At Shantung, and other places where there is comparatively little frost, the sun constantly beating upon the hills, evaporates all the moisture, precludes vegetable life, and so leaves their tops standing out against the sky, bleak and barren. Again, in some places the forests are impenetrable, and in other places, as, for instance, in the high road from Kirin to Ninguta, so dense, that the traveller goes for miles without even being able to see the sun. Swamps are also met with, often of considerable extent.

The Character of the Population.—The bulk of the people are Chinese. They are either immigrants or the descendants of immigrants from the northern provinces. They have settled along the lines of the great highways, and are found in hamlets, villages and towns of greater or lesser magnitude all along these routes. Fresh settlers increase their numbers year by year, and as the Government encourages them, by giving them land at nominal prices, they are creeping out on each side, gradually reclaiming the waste ground and forest land in their neighbourhood. But it will take long before any impression can be made on this vast country. These Chinese carry their industrial habits and local manners and customs with them, so that Manchuria is just China extended out. One differential feature strikes you; they are healthier and stronger than their countrymen in the south, the result not only of the climate, but also of the abundance, variety, and cheapness of food.

A good proportion of Mahommedans are found amongst them. These religionists keep themselves distinct from the Chinese. In every town of any importance they have their mosques, eating-houses, &c. Sometimes they live in a separate locality, and foster a strong clannish feeling. In some places they form a considerable percentage; as, for instance, in Kirin, where they have three mosques. They are well disposed towards foreigners, and show us every civility. They claim kindred with us; say they are from the west, worship the same God, and have the same characteristics as I have already described in papers on Shangtung and Shan-si. Foreign travellers would do well always to inquire for them, when they will get rooms much cleaner and food much more palatable than at heathen inns.

The Manchus.—The Manchus are in the minority; moreover, there is some difficulty in distinguishing between them and their invaders. Those of them who live in the Central Province have settled down to agriculture or other definite pursuits; and in dress, manners, customs, and language, follow the Chinese. Their features are very much alike—their frames a shade coarser and stronger. Sometimes their guttural language indicates their descent, but in general it is only by inquiry that you can learn to what people they belong. Their women have large feet; but this is not always a sign of Manchu origin, for many of the Celestials have sense enough, when removed from the restraints of fashion, to discard this atrocious custom. The Manchu language is not much cultivated. The boys first learn the Chinese characters, and read the Chinese classics; and then those, who from position or prospects deem it necessary, go to some of the Manchu schools in the district cities.

Of roving Manchus I met with none, and am inclined to think this nomadic propensity has entirely died out. I met several companies of Manchu soldiers returning from the wars. They belonged to Northern Manchuria, and were much less civilised in appearance. Still they appeared to belong to families who pursued agriculture, and I understood some of them to say they were returning to resume their work in the fields.

The Number of the Population.—Every man forms a different estimate of the number of the population, and it is somewhat difficult to arrive at a satisfactory conclusion. The districts along the great highways are populous enough, and a traveller is liable to be misled; but when you discover that beyond these there are very few inhabitants, you are guided in your calculations, and are forced to set down the population as not greater than, say, two or three millions.

Cities and Chief Towns.—Kirin is the capital of the province. It is most beautifully situated, more so than any city I have visited in China. Jeh-hol has many points of great attraction; Kalgan in several respects commands the admiration of all. Tsing-chau-foo, in Shantung, is picturesquely situated. Toong-chang stands in a fine situation, with the Yellow River guarding it on two sides, but Kirin far surpasses them all. It lies at the foot of hills of varying size and contour, which form about three-fourths of a circle around it. The open space on the south is occupied by the Soongari, a fine majestic river, sweeping past it, and then making its way through a valley northwards. Opposite the city it is about 300 yards broad; and when I was there, it was as placid as a summer lake, and as blue as the sky above, forming a most beautiful contrast with the city and fields beyond.

The city itself is not equal to the situation. Had Moukden such a position it would be a noble place; as it is, the streets are narrow and irregular; the shops low in roof, inferior in style, the best being but second and third rate in character.

The great street runs east and west, but not in a direct line, curving here and there. A portion of the south side of this street is built on wooden piles, stretching out over the side of the river, reminding one of southern cities. Another great street runs north and south, and there are a great many cross streets, branching off at irregular intervals. Though the shops are inferior, yet, when you pass through the archways which lead to the large warehouses, you find many of the squares very tastefully ornamented. In the place where we lived, one side was occupied with flower-pots, ranged in tiers, one above another, with flowers from the south, such as roses, geraniums, and a variety of flowering shrubs. In front of the main door were tanks with gold and silver fish; and a little further removed was a vine in tressels, just beginning to open its leaves. The walls are low and very inferior, the lower part being built of mud, while the upper portion, having a castellated top, is the only place where bricks are used. The gates were somewhat lofty, compared to the wall, and were striking enough at a distance, but were found to be only painted wood, and made for a show. Recently built, these walls and gates had a better appearance than they will present when they have lived through one or two seasons of bad weather.

One peculiarity deserves special notice; the streets were all paved with sawn wooden blocks, which cannot fail to make a strange impression on the traveller accustomed to the hard streets and dreadful jolting of other cities; the smooth way and the dull sound, as the carts pass over, make him feel in reality that he is in a different region from China Proper. The Chinese name for Kirin is Chwen-chang, or "the Naval Yard" *par excellence*, a large number of boats and small junks being built in this place for various uses on the Soongari, Nonni, Amoor, and other rivers in Central and Northern Manchuria.

A-she-hoh (also called in Manchu Alchuku).—The city next in importance to Kirin is A-she-hoh.—This city lies 30 miles south of the Soongari, and is situated on the slopes of a gentle descent, which leads to the river, from which it takes its name. It consists of one long street, about one and a half mile, with many branching lanes, there are a large number of shops, and a good deal of country business done there, but the shops are all third and fourth rate, and yet we found a great variety of porcelain and other ornamental things from the south exposed for sale, indicating comparative wealth. There are said to be

1800 families of Mahommedans in the neighbourhood. They have one mosque, which was burned down by rebels in 1866, because they sided with the people in defence of the place. The population of this city is about 30,000 or 40,000.

Pe-tu-na (*Sinicè* Sing-chung).—The third city is Pe-tu-na, called Sing-chung by the Chinese. It lies on the north-east bank of the Soongari, and is a city of good size. It consists of two large streets, which run north and south and east and west. The cross forms the chief market, and there is a good deal of business done. The shops are like those in A-she-hoh, and the place rather dirtier. There are a great many Mahommedans; they have a fine mosque, which we visited at daylight. The population of the place I should take to be 30,000 or so.

San-sing, the last town in Chinese territory, lies on the south bank of the Soongari, on the east bank of the Hurka, and the south-west bank of the Hung Ho, having water on three sides of it. It consists of one long street, about two-thirds of a mile, running east and west, and two shorter streets running north and south. The shops are fourth class. The trade chiefly country trade. Not a few are engaged in sending boats down the Soongari to the Amoor with provisions for the sparse settlers scattered there. Others barter with the Fish-skin Tartar tribes, who visit them periodically. There are sixty families of Mahommedans; they have a mosque, which has suffered from a recent flood, but is now under repair. They have also two good eating-houses.

La-lin is situated about 120 miles north of Kirin; it is a market-town of about 15,000 or 20,000 people. The walls, which are new, enclose a large space, but the buildings occupy less than one-half of the area.

Ninguta is about the size of La-lin, and is not of much commercial importance as yet. The small business which is carried on is transacted in the suburbs.

Besides these fine district cities, as they may be called, there are other towns of greater or lesser importance. Chief among them appears to be Shwang-chung-poo, about 45 miles west of A-she-hoh. It is walled round, and consists of two long streets, north and south, and east and west. They are about 5 li long, and full of large inns, and dirty beyond description.

Woo-la-kiai, or Ta-seng-oola, lies about 25 miles north of Kirin, and consists of one long street, and a few short ones running east and west. It has a few good shops, but the trade is of little importance. There are the ruins of a fine old city in the north.

Koo-yu-shu, somewhat about 80 miles north of Kirin, may also be referred to, but this is only a market-town.

The Fertility of the Soil.—The height and luxuriance of the tall grass in the prairie grounds in the north-east corner of the Province, speak volumes for the fertility of the soil in that quarter. While there it was just bursting into beauty, but independent witnesses in the extreme east, near Hun-chwen, and also in the west, assured me that the grass often reaches 3, 4, and 5 feet, and sometimes entirely overtops the traveller, leaving him, like the fabled mermaid in the depths of the ocean, to make his way among waving swathes.

The huge forest and meadow lands are different in character, but equally fertile. On one part we saw them making a deep cutting, with the view of repairing the road.

The soil was extremely rich, a magnificent fat loam, apparently formed of millenniums of leaves. After the trees and brushwood are removed, little trouble is needed to secure plentiful crops. I took some notes of the quantity produced, which I here subjoin; and readers must recollect that the implements of agriculture are of the rudest nature, and, as a rule, no manure is used. At the small farms in the midst of the Prairie-ground, the average yield was approximately thus:—

10 mow of land yielded	16 tan of small millet or kutsze.
10 " "	12 " tall millet or kau-liang.
10 " "	16 " Indian corn or maize.
10 " "	10 " pulse.

Six mow is equal to one acre; and one tan is equal to 400 lbs.*

Food and Plants.—Pulse stands first in importance, not only in respect of its use as an article of food, but from its nature as an article of export. There are several varieties of large and small. The large comprises the yellow, the black, the yien-teu, or French-bean, and the blue; the small embraces several kinds of peas of various colours, as red, gray, and variegated.

The yellow bean is crushed into beancake and oil; the black is used for horses and mules; and the blue for food, and also for vermicelli; the French-beans are also used as food. The small kinds serve a variety of purposes, many are ground down for vermicelli. Pulse is grown in immense quantities wherever agriculture is pursued. They sow it in the beginning of May, and reap it in October. The straw forms good fodder for cattle.

Millet.—Next in importance stands millet. This grain is used for food and also for cattle. There are two species, the tall and the short; the tall comprises four kinds—the red, the white, the black, and the sweet. The red is that chiefly culti-

* Since writing the above, I have found that the size of the mow differs in Manchuria, being larger, so that these figures can only be looked upon as approximations.

vated, and has large heavy clusters of grain; the white and black are chiefly prized for their stalks, which are used for roofing, making bridges, walls, and fuel, &c. The sweet, or sarghum, from which sugar can be produced, is not much cultivated in this quarter. The short-millet includes several varieties, the chief kind is called Kutze, one of the staples of food, like oatmeal in Scotland. It is used in a great variety of ways, and makes excellent pounded-cakes, &c. The seed is small like sago, only golden yellow in colour.

Indian corn is cultivated pretty extensively, and forms an article of food. When there is a surplus it is distilled into spirits, like the seeds of the tall-millet.

Wheat.—The wheat of this province is all sown in spring, is bearded, and not much valued by the people.

Barley.—This cereal is also found, though not in large quantities.

Potatoes are indigenous, but, though good, are not extensively used.

Opium.—This article demands more than a passing notice, not only from its bearing upon the moral welfare of the Chinese, but also upon the commercial interests of foreigners. A few years ago it was a stranger to this quarter of the world, but now is rising with great rapidity into ominous and terrible significance. We found the poppy under cultivation, not only in Eastern Mongolia, but also everywhere in that level portion of country which lies within the link of the Soongari, on past A-she-hoh, to long. 128°, lat. 46°, and down to within a few miles of Kirin. In some places it had been grown for several years, in others for only two or three, and in some just commencing. Natives told us that it was much more profitable than pulse or any grain, that the proportion was as 24 to 14; that 10 mow of land yielded, say, 14,000 to 15,000 cash, when sown with millet; it brought from 24,000 to 25,000 cash, when laid down for the poppy. They knew well that its cultivation was illegal, but said the mandarins winked at it, on the reception of a sum of money or a gift in kind.

There is thus great reason to fear that it will spread all over the country. The prices varied from 350 cash to 500 cash per oz.; but we were told in several separate places that it could be bought much cheaper in autumn when new,—that at that season it could be procured for 200 to 250 cash per oz. They said it was better, and not adulterated as the foreign opium which reached them. As might be expected, its effects upon the population were most melancholy. Farmers' sons, and the majority of the young men, in almost all grades, including waiters at inns, were addicted to it. We found

people in all stages of use, some just beginning, some in full vigour of smoking, and others who had smoked to the point of repentance, but who now found its mastery and were its remorseful slaves. We were constantly asked about a means of cure; and in one case a man followed us almost in tears, clinging to the cart, and would not believe that we had no remedy. Sad and awful is the havoc this drug is making in China, and we have not seen the end of it, nor even its culminating point. The worst is coming. It is now produced in Sz'chuen, Shensi, Shansi, Mongolia, and Manchuria; the mandarins are corrupt, and, indeed, interested in its success. Every year more land is laid down, the vice is increasing, reaching the poorer classes and even women. The habit is, as a rule, incurable, when it has reached a certain point. Ninety in every hundred thus stand before us doomed men, the majority sure of death within twenty years. What a sight! like some dreadful tide of destruction slowly rising over the people.

Indigo.—Previous to the introduction of the poppy, indigo formed a very favourite and important item in the crop raised by the farmer. So far removed from markets, roads so bad, carriage so expensive, it presented an article which could be compressed into small bulk, and secure a large return either in money or goods. Hence it was greatly cultivated, and formed the chief article of export from certain distant quarters.

I have no reason to believe that its production has diminished since the poppy has afforded them a yet more profitable investment, and there are those who think that the latter will only add to their incomes, and enable them to purchase more foreign goods. Were opium a safe article this would hold good, but as it demoralizes the growers and those around them it cannot be a benefit. *Whatever injures a people must injure commerce in all its relations.*

Industrial Pursuits.—In addition to agriculture and trades bearing thereon, the only other pursuits we saw were crushing pulse and distilling. The latter was carried on sometimes in a very extensive way. Here and there we met huge distilleries, employing a great number of men, and each supporting a multitude of pigs. In this way they dispose of their surplus crops, and export the whisky to the south.

Probable Mineral Wealth.—It will be observed that the hills in this province run in the same direction, and exhibit the same outward characteristics as those in the Southern Provinces and Shantung. The probability, therefore, is that they contain the same minerals. No one has tested this experimentally, as the abundance of wood provides fuel on easy terms, while manufactured iron for agricultural purposes can be had at comparatively

moderate rates; but various minerals have been discovered wherever people have been necessitated to seek for them. Coal has been found in two localities; on the banks of the Bureya River on the north, and all along the sea-coast on the east, to the north of Possiet. Gold is found in some of the rivers, and also on the sea-coast.

Precious stones, such as agates, cornelians, onyxes, and other varieties, are found on the east of the Usuri. Plenty of iron and coal is found in the hills adjoining the Southern Province, portions of the same range, so that everything points to the conclusion that the mineral ores are varied and rich.

The Fauna.—The fauna is sufficiently startling to those who have not previously inquired into the subject.

The true Bengal tiger abounds in the forest, and reigns dominant there. We were fortunate enough in not seeing any of them; but one day, being benighted in a forest, and having arrived at the inn about 11 o'clock at night, mine host told us that God's blessing had been on us, for a few days previously a young tiger had attacked a cart, and attempted to drag away one of the mules in broad daylight. Natives are often carried off by them, and it is reported that several Russians have in this way mysteriously disappeared.

It is of the same species as the Bengal tiger, and reaches a great size, averaging about $9\frac{1}{2}$ feet to the root of the tail. The finely striped skins are highly prized, and judging from the immense number annually exposed for sale in the chief towns, there must be no lack of these brutes among the hills. They are found so far as 51° N., and often go as far as 53° in quest of food.

The black bear also infests these forests, and with the tiger is a great terror to the natives.

Panthers are also very common. The pole-cat and weasel are found in all quarters.

The fox is found everywhere; in more retired places wolves abound, and we had the pleasure of seeing one almost every other morning for a time. Wild boars are found in several places, and their flesh is highly esteemed.

On the north of the Soongari, near San-sing, at one of the places we visited, sables were found, and we had abundant proof of this as some of the common men had caps made of sable-skin. They described to us the habits of the animal and method of capture.

Deer are plentiful and of several kinds; such as the stag, the antelope, &c.

Ground-squirrels and tree-squirrels are common.

Rabbits and hares were also seen.

Bats of various wing are met with.

The hedgehog is also found here, as well as in Shan-tung. We have met it in both places, thus invalidating assertions which have been made that it did not exist in this quarter of the world.

Domestic Animals comprise the horse, mule, ass, ox, sheep, pig, dog, and cat. The horse is small and hardy; the mule, wonderful in its endurance, is a finer animal than those in Spain. The ass is like our own; the ox in general like Highland cattle, a larger kind is used in agriculture. Sheep have large heavy tails, and are dull beasts. The pig black, with long snout, is the very picture of ugliness; the common dog, in shape like our shepherd dogs, in barking demonstration terrible, in courage nil. The cat, like English cats.

Sheep are few, contrary to our expectations: indeed, on the north of the province, and beyond the Soongari, we did not meet one—pigs being more prolific, more easily fed, and better fitted for roughing it in the extremes of temperature.

Of Birds there is considerable variety. There are several species of eagles, not a few kinds of hawk, several varieties of owl. In less retired places are pheasants, red-legged partridges, quails, grouse, and a bird of the size and character of the turkey.

Small birds are very plentiful in the copses; and not a few singing-birds of familiar song, especially north of the Soongari, such as thrushes, finches (bullfinch among the rest), linnets, tits, hammers, and buntings.

Waterfowl of endless variety and countless numbers frequent the rivers and marshes, such as wild geese, ducks, teal, snipe, cormorants, heron, cranes, and gulls. North of the Soongari we met the lapwing, or pee-wit. Sitting in the cart we heard it cry; we jumped out, saw the bird alight, followed it, and then others rose and enacted in this strange land the scene so familiar on the moors of Ayrshire. They flew round overhead with their well-known sweep, crying, and, at once threatening and alluring, as in other lands. The cries of the curlew and the plover also broke the solitude, and aroused crowds of associations in our minds.

Ravens and jackdaws were common.

Swallows are everywhere, and the elegant "swift" was often seen circling round some pagoda or such eminence. The cuckoo was very common, one kind with a bushy-tail—which went like a wagtail—greatly interested us for several days. It was an extremely pretty bird, and its call was the first thing heard in the morning, and it continued throughout the whole day enlivening the scene.

The laughing-dove was also met with, and it was amusing to hear the bird running over its well-known formula of *Kwang Kwun haou Kuho*—"Solitary man, may you have a good journey,"—as you went through the wood; so discordant with the other sounds, just like the laughter of a fool in an oratorio.

Fish.—Fish are plentiful in the rivers—such as trout, carp, perch, pike, eel, and salmon. This last is very important. The natives catch it in considerable quantities in season, and the tribes on the north of San-sing prepare the skins for making summer clothing, which, when properly manipulated and embroidered, look very pretty. We found some strange, fresh-water shell-fish—one a sprout-fish.

Reptiles, such as snakes, lizards, and adders, are common; frogs are ubiquitous, and insects of many kinds (1000 species the Russians say) hover in innumerable clouds, to the annoyance of man and beast.

The Flora greatly interested us, not from its gorgeousness, nor from its freshness, nor from its variety, but by the irresistible attraction of finding in this far distant country numerous home-plants in such home-like places. On the Prairie-grounds we found the grassy plain studded with innumerable dandelions, often grand in their size and beauty. At this early season, on the hill sides, we found the wild tulip in immense numbers in all directions. Amongst the woods we met the wild geranium, blue pimpernel, fox-glove, ferns, borage, &c.

In the valleys we found whole fields of cowslips, buttercups, and the crow-foot's early bell. In the low grounds were crowds of sedges, the iris, generally blue, but sometimes yellow, &c.

Here and there we encountered varieties of the Scotch thistle, and several times, as on the banks of the Soongari, we met it growing in all its beauty—raising its head above all its compeers—like some Highland chieftain in full costume, plume and all, among the languid sons of China. Everywhere in hill and steppe, and wood and glen, we found the dockwood, soldier-grass, common thistle, and lots of familiar grasses.

In two places we met the nettle—first on the banks of the Soongari, close by a cottage; and next in the forest to the south of Kirin. The aborigines use it like hemp, to make ropes.

On our return journey the wild roses began to open; and soon we were regaled, day by day, with a profusion of rose-blossoms everywhere along the road-side.

Trees.—Like the flowers, the trees were more interesting, from their well-known features, than from any remarkable peculiarities; wherever we went we found five or six varieties of the

willow-tree, two or three species of the oak, also the elm, birch, and maple.

The silver-birch, so well named, with its beautiful bark, often imparted a brilliance to the dark woods, like a well-arranged piece of colouring in a sombre picture, or a lightsome fairy among a common crowd.

One tree, unknown to Great Britain, but common to the north of China, abounded everywhere. I refer to the *Salix polaris*, a tree not unlike a poplar in appearance and size, and which is greatly esteemed by the natives.

We found the mistletoe in widely separated places,—at Moukden, at Kirin, also north of the Soongari.

NORTHERN MANCHURIA. — *Boundaries and Extent.* — This province, called Tsi-tsi-har, or more generally Hieh-loong-kiang, or "The Black Dragon River Province," by the Chinese, is bounded on the north by the Amoor, on the east and south by the Soongari, and on the west by the Nonni and Mongolia. Its area is 195,000 square miles. There appear to be only two cultivated regions in this province, viz., that in the valley of the Nonni, and along the banks of the Soongari. In the former we have the cities of Tsi-tsi-har (or Sinia-pu-kwe) and Mergen; and in the latter the town of Hu-lan and several villages of greater or less importance. The other portions are in their natural wild condition.

We travelled about 90 or 100 miles in this district, on the north of the Soongari, and found villages few, far separate, people sparse, and only patches round their dwellings under cultivation.

The soil appeared excellent, only waiting the spade of the settler to yield an abundant harvest.

In some places prairie ground, dotted with herds of cattle carefully tended, extended as far as the eye could reach, and at other times mountains rose in succession far on towards the north.

The climate, fauna, flora, and general productions were the same, only allowance being made for their more northerly latitudes.

The Future of the Country.—Estimating Liao-tung approximately at 60,000 square miles, Kirin at 135,000, Tsi-tsi-har at 195,000 square miles, this gives you an area of 390,000 square miles, or 249,600,000 square acres. If you add to this the country of Eastern Mongolia, which lies in the same latitudes, you have a territory nearly equal to the half of China Proper, Possessed of a good climate, fertile soil, and mineral resources and good harbours—by far the greatest portion of it as yet hardly touched by man—who can doubt but that a great future

lies before it? One thing is evident: it is clearly intended to receive and support the overflow of the Chinese population in the north of China for many years to come; and when it is properly opened up, and attention directed to its minerals, it must, together with Corea, rise into one of the most important districts in this quarter of the earth, and play an important part in the history of the world.

II.—*From Metemma to Damot, along the Western Shores of the Tana Sea.* By HENRY BLANC, M.D., M.R.C.S.E., &c., Staff Assistant-Surgeon H.M. Bombay Medical Staff, lately on Special Duty in Abyssinia.

Read, December 14, 1868.

WHEN, after thirteen months, Theodore at last acknowledged our mission and granted a surly reply to our third letter, he himself traced our route. He ordered us to proceed through the Soudan, and, arrived at Metemma—a Takruree settlement on the north-west frontier of Abyssinia—to communicate at once with him. We acted implicitly according to these instructions; and on the 28th of December, 1865, agreeably to his Majesty's latest commands, we passed the frontier, and proceeded, under escort, to repair to the Imperial camp, at the time in the province of Damot.

The distance from Metemma to Ashfa, the district where we met Theodore, is about 240 English miles; and to accomplish that journey we had to march through passes and defiles, follow the western shores of the Tana Sea, cross some of the finest provinces of Abyssinia, and ride over undulating plains graced by the presence of mighty herds of cattle, or walk single file amidst boundless cultivated fields.

Two years afterwards a gallant English army, landed by a Merewether and led by a Napier and a Staveley, marched from Zoula to Amba Magdala, a distance of some 320 miles, climbing mountains, descending wall-like precipices only to scale again more formidable ascents; struggling at every step with Nature in its most wonderful chaos, across a country badly watered, and where man labours hard to snatch from the soil a meagre harvest. Indeed, it required all the genius of the commander, all the sturdy courage and perseverance of the men, not to falter in the way and remain firm in the resolve "to set the captives free."

It is not my intention to speak of Eastern Abyssinia. At